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CONFIDENTIAL

MEETING LOG  
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: ANSI Z21/CGA Joint Central Furnace Subcommittee and  
Communications Working Group (CWG)

PLACE: Sheraton Hopkins Airport, Cleveland, Ohio

MEETING DATE: 09/13/94 - 09/14/94

LOG ENTRY SOURCE: Ronald A. Jordan

ENTRY DATE: 09/20/94

COMMISSION ATTENDEES:

Ronald A. Jordan *RAG* ES

NON-COMMISSION ATTENDEES:

Daryl L. Hosler, Chairman  
(Subcommittee) Southern California Gas Company

Paul E. Beach  
(CWG & Subcommittee) White-Rodgers Division  
Emerson Electric Company

Glenn T. Hooker  
(Subcommittee) Union Gas Limited

Michael Eberlein  
(Subcommittee) York International

P.F. Swenson  
(Subcommittee) CNG Service Company

Hall Virgil  
(Subcommittee) Carrier Corporation

James Gazda  
(CWG & Subcommittee) AGA Laboratories

George Gruss  
(CWG) AGA Laboratories

Gary Thibeault  
(CWG & Subcommittee) Gas Appliance Manufacturers  
Association

Jake J. Verderber (CWG & Subcommittee)	Rheem Manufacturing Company
Jim Smelcer (CWG & Subcommittee)	Rheem Manufacturing Company
George H. Lofgren (CWG & Subcommittee)	Consultant for Minnegasco
D. Bruce Cleveland (CWG & Subcommittee)	Resources Applications, Designs & Controls, Inc.
Alan R. Anderson (CWG & Subcommittee)	Honeywell Inc.
Ajax Arvin (CWG)	Keating of Chicago, Inc.
Gale Schmidt (CWG)	Atwood Mobile Products
Bob Vincent (Subcommittee)	Suburban Manufacturing
Keith Jollay (Subcommittee)	Suburban Manufacturing
Mr. Bruce Hopkins (Subcommittee)	Recreational Vehicle Industry Association (RVIA)
Mr. David Swanson (Subcommittee)	Atwood Mobile Products
Andrew Comstock (CWG)	Union Gas Limited
Charles W. Adams (Subcommittee)	The Ducane Company
Glen Edgar (Subcommittee)	Selkirk Metalbestos
Dave Francey (Subcommittee)	Centra Gas Ontario Inc.

Jim Hickson (Subcommittee)	Lennox Industries, Inc.
Kyu S. Hwang (Subcommittee)	DMO Industries
Mark Kruse (Subcommittee)	The Peoples Gas Light & Coke Co.
Gregory A. Lynch (Subcommittee)	Amana Refrigeration, Inc.
Henry Ng (Subcommittee)	CGA Approvals, Inc.
Tom Chase (Subcommittee)	Evcon

#### **MEETING SUMMARY:**

The ANSI Z21/CGA Joint Central Furnace Communications Working Group (CWG) and Subcommittee members represent broad interests in the areas of gas appliance and component manufacturing, as well as gas production, distribution, and utilization. The CWG and Subcommittee members met to focus on and discuss technical and communications issues pertaining to the harmonized central furnace standard (Z21.47). Many of the issues that each working group discussed will be submitted to the full Z21 Committee for consideration as revisions to the harmonized "American National Standard/National Standard of Canada for Gas-Fired Central Furnaces."

CPSC staff attended these meetings in order to respond to any safety related discussion and/or recommendations. Following are the CWG and Subcommittee meeting highlights:

#### **Communications Working Group meeting, September 13, 1994.**

##### **Item 1. Status Report on the Establishment of a Joint Ad Hoc Advisory Group on Graphic Symbols and Communications Protocol.**

A new Z21/Z83/CGA Joint Ad Hoc Advisory Group on Graphic Symbols And Communications Protocol for Gas Appliances and accessories has been established.

##### **Item 4. Status Report on GAMA Consultant Reviewing Central Furnace Instructions and Markings with the Z535 Standards.**

GAMA has hired a consultant who will conduct a legal review and comparison of the furnace

standard to Z535, with the hopes of adapting part of Z535 to the furnace standard. GAMA's Furnace Engineering Committee (FEC) will review the results. The FEC will report on their review of the consultants report when completed.

**Subcommittee meeting, September 14, 1994.**

**Item 2a. Request For Further Consideration Of Proposed Exemption To 4.4.6**

This agenda item involved a request from RV furnace manufacturers to give further consideration to the proposed exemption of RV furnaces from Section 4.4.6 of the standard. Discussion began with a presentation of RV furnace manufacturers position on and rationale for the proposal. As was the case at the Technical Working Group meeting in April of 1994, Bob Vincent of Suburban again spoke of the technical difficulties and resultant potential for nuisance shut-downs associated with components designed to enable RV furnaces to comply with the requirements of Section 4.4.6. Specifically, he spoke of pressure switches being the only feasible component that would enable an RV furnace to comply with Section 4.4.6. Mr. Vincent added that because RVs are mobile, and therefore travel at various altitudes throughout the nation, they are exposed to a variety of pressures. It was pointed out that such pressure variations would affect the pressure at which the pressure switch shuts an RV furnace down, and would allow additional nuisance shutdowns.

Daryl Hosler pointed out that during harmonization of the American and Canadian central furnace standards, ANSI Z21.47, standard for Gas-Fired Central Furnaces (Except Direct Vent Central Furnaces) and ANSI Z21.64, standard for Direct Vent Central Furnaces, were also combined into one standard, Z21.47. Mr. Hosler stated that RV furnaces were originally covered by Z21.64. During that time Z21.64 did not include the blocked vent/intake provisions found in Section 4.4.6 of Z21.47. He went on to point out that RV furnaces inadvertently fell under the provisions of Section 4.4.6 only after Z21.47 and Z21.64 were combined, but that the original requirements for RV furnaces should not have changed merely because the two standards were combined.

Staff pointed out that it had attained incident data from the CPSC Clearinghouse and from the National Highway Transportation Safety Bureau (NHTSB) that indicated that there have been some CO poisoning incidents caused by blocked vents in RVs. Staff pointed out, however, that it was not in a position to release the data yet, because the Clearinghouse data had not yet been cleared by CPSC, and the NHTSB had not cleared its data either.

After much discussion on this item, the proposal was put to a vote, where it was passed by the Subcommittee membership by a vote of 20 for and 2 against. The subcommittee voted to allow the exemption of RV furnaces from Section 4.4.6 of the standard. This item will now be passed up to the full Z21 committee for final approval before officially being incorporated into the standard.

Bruce Hopkins of Recreational Vehicle Industry Association and David Swanson of Atwood Mobile Products stated that they were not aware of the incidents that staff spoke of, but stated that when the incident reports are cleared for release, they would like to review them

since they want to made aware of any incidents that they did not know about.

#### **Item 6. Carbon Monoxide Emissions Report on Draft-Hooded Central Furnaces**

This item involved further discussion of staff's recommendation (at subcommittee meetings in February and September of 1993) that the subcommittee consider adding coverage for partially blocked vents in the requirements for Blocked Vent Shutoff Systems, Section 2.19 of the Gas-Fired Central Furnace (Except Direct Vent Central Furnaces) standard (currently Section 2.19 of the newly harmonized standard). After discussion of this issue at the September 21 and 22, 1993 subcommittee meeting, staff informed subcommittee that pending development of injury data pertaining to this issue, staff would withdraw its request. As requested at that meeting, staff made available, copies of the report titled "CO Emissions Tests From Draft Hood-Equipped Gas-Fired Central Furnaces" and the accompanying Executive Summary. Staff reiterated to the subcommittee that although the report spoke well of the Vent Safety Shutoff System's (VSSS) effectiveness in addressing total vent blockage, there remained unanswered questions about the systems effectiveness in addressing partial vent blockage. Mr. Hosler asked staff if any injury data supporting the recommendation had been attained. Staff replied "No." Staff asked again if any of the subcommittee members knew of any data or analysis that dealt with the effectiveness of the VSSS in detecting partial vent blockage. None of the subcommittee members spoke of any. Due to a lack of supportive data for the recommendation, it was not approved by the subcommittee.

cc: Colin Church, EXHR  
Donald Switzer, ESEE  
Stacy Reuben-Mesa, EXPA